

October 16, 1997

The Norman City Council  
Norman Municipal Building  
P. O. Box 370  
Norman, Oklahoma 73069

Honorable Mayor and Council Members:

In accord with your request, the Norman Greenbelt Steering Committee is presenting this initial report on a greenbelt and greenway system for Norman. We have examined a wide variety of rural and urban open space programs and projects in communities throughout the United States as well as several British programs where the greenbelt concept originated. It is evident that contemporary uses of greenbelt open space projects are widely used in both large and small cities throughout America and are rapidly increasing in number and popularity.

The Steering Committee believes that Norman also could receive many long-term economic and quality-of-life benefits from a carefully planned and developed greenbelt system. Models from other communities include protection of rural open space and prime agricultural lands; preservation of unique environmental elements and conservation corridors; development of major parks and recreation areas; and construction of off-road trail systems for hiking, biking, horseback riding and nature study. These recreational opportunities would be of special benefit to the youth of Norman and would provide a unique legacy to be enjoyed by future generations.

The plan for the greenbelt system should preserve elements of the natural environment in a way that would enhance the beauty of both our rural and urban places. At the same time, the plan will need to be sensitive in protecting private properties and the desire for personal privacy and security in the daily lives of all our citizens. To secure these objectives, the Steering Committee recommends that plans for greenbelts and greenways be prepared under the direction of this or some similar committee, with involvement of Norman City Staff and supplemented with professional technical assistance when needed. This arrangement would assure that the plans would be developed locally and under the guidance of local officials.

We believe that the greenbelt program of open spaces and greenways, as proposed in this report, would further expand Norman's role as a regional cultural center. This present period of accelerated economic growth is an excellent time to initiate this long-term effort of environmental protection and life style enhancement. We are grateful for the opportunity to work on this exciting program.

Respectfully submitted,

Lee Rodgers, Chair

## Greenbelt Steering Committee

**A REPORT ON GREENBELTS AND GREENWAYS**  
**FOR NORMAN, OKLAHOMA**

*Prepared for the Mayor, the City Council, and for  
the Residents and Friends of the City of Norman*

*by the*

*Citizens Greenbelt Steering Committee*

Norman, Oklahoma

October 16, 1997

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CITY OF NORMAN, OKLAHOMA

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October, 1997

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## A REPORT ON THE GREENBELT CONCEPT FOR THE NORMAN COMMUNITY EXECUTIVE SUMMARY

The creation of a Greenbelt System of open spaces has been adopted as one of the goals of the new NORMAN 2020 Land Use and Transportation Plan. A Greenbelt Steering Committee was appointed by the City Council to study and report on the pros and cons of a greenbelt for Norman. This report is presented as an initial response to that mandate.

The greenbelt idea originally developed as a part of the English Garden City Movement at the beginning of the present century. It has become increasingly popular in American cities for both growth management and open space preservation since World War II. In England, a greenbelt was initially a rural open space that surrounded a city or town and from which urban growth was prohibited by various legal means. This ring of rural territory prevented the growth of the city beyond the greenbelt and also protected the city from the encroachment by other nearby communities. In the United States, the term greenbelt not only denotes open spaces surrounding a city, but also includes open corridors along rivers, streams, and flood plains, as well as parks and recreation areas, farmland, woodland and wetland preserves. Off-road trail systems (termed greenways) for hiking, biking, horseback riding, nature study and other recreation uses are frequently constructed as a part of a greenbelt system.

Many communities throughout the United States have developed greenbelts and administered them through a Land Trust program. The Land Trust Alliance (LTA), reports that in 1994 there were approximately 1,100 land trusts in America, a number which continues to increase rapidly. More than thirty open space plans for local communities were reviewed by the Steering Committee. In terms of scope, implementation, financing, and economic and life style impacts on the city, the Boulder, Colorado greenbelt plan seems to be a program that would provide a particularly useful guide for Norman. (See pages 1-3).

The size and natural features of the Norman townsite are quite unique in comparison with other U.S. cities of a similar population. The 193 square miles currently within Norman's corporate limits offer citizens the contrasting landscapes of the Cross Timbers woodlands on the east and the grasslands of Ten Mile Flats in west Norman. There is a rich diversity of wild life throughout the riparian corridors of the Canadian and Little Rivers and their tributaries. Lake Thunderbird, with its park and trail system, serve both Norman residents and many other visitors. All of these are landscape features of special quality to be enjoyed, used and carefully conserved. (See pages 3-5).

A greenbelt program would add a variety of new administrative and legal options to augment the more traditional tools of zoning, building codes, subdivision regulations and infrastructure standards. Legal approaches that have been extensively tested in greenbelt development in other communities include the following:

1. Public acquisition of urban development rights;
2. Conservation easements;
3. Public purchase and use of land;
4. Public purchase of land and lease back/sale with covenants and other restrictions;
5. Private donations of land, easements, and development rights;
6. Private donations of land with tax advantages. (See pages 5-9).

AFTER STUDYING GREENBELT CHARACTERISTICS, USES AND IMPACTS ON THE QUALITY OF LIFE IN OTHER COMMUNITIES THROUGHOUT THE UNITED STATES, THE STEERING COMMITTEE BELIEVES THAT A GREENBELT PROGRAM, COMBINED WITH A SYSTEM OF GREENWAYS, CAN PROVIDE ENORMOUS IMMEDIATE AND LONG TERM BENEFITS FOR THE CITIZENS OF NORMAN AND FOR FUTURE GENERATIONS. TO ACHIEVE SUCH A PROGRAM WILL REQUIRE A STRONG COMMUNITY COMMITMENT, SUPPORTED BY ENTHUSIASTIC CITIZEN VOLUNTEERS AND PROFESSIONAL STAFF, OVER A PERIOD OF MANY YEARS. IF THE CITY COUNCIL OF NORMAN DETERMINES THAT THE DEVELOPMENT OF SUCH A PROGRAM IS DESIRABLE AT THIS TIME, THE FOLLOWING ACTIONS ARE RECOMMENDED:

- A. Charge this Steering Committee, or a newly created Land Trust committee, with the task of preparing a Greenbelt Plan. The Greenbelt Plan should set forth the basic purposes and objectives of the greenbelt program; establish the land areas and other elements to be acquired or otherwise protected by the program; ascertain the legal measures and administrative organization needed to develop and maintain the greenbelt and greenway system, including the professional and other staff needed to operate and maintain the system; assess the costs and sources of financing required for planning, developing and maintaining the system; and finally, identify the economic benefits and costs that Norman might expect from a greenbelt program. We believe this plan should be prepared through a combined effort of this committee, city staff and, where needed, with specialized assistance from technical consultants.
- B. A Norman Land Trust should be created to implement the greenbelt program. It is suggested that a charter be prepared to create a Land Trust composed of 25-35 citizen members. A Land Trust Associates program should also be considered as a means of broadening the base of continuing citizen support for the program. If desired, the Steering Committee will prepare a tentative charter for a land trust and provide a more detailed description of a land trust associates organization and responsibilities.
- C. The long term success of a Norman Greenbelt and Greenway Plan is entirely dependent on the continuing and enthusiastic support of many coalitions of citizen interest groups. These groups need to be identified and involved in the planning and implementation process. They will have much to contribute to any community wide open space system and environmental protection plan that may evolve. (see pages 10-14).



## PART ONE

### THE GREENBELT CONCEPT FOR THE NORMAN COMMUNITY

#### INTRODUCTION

During the recent planning process, which resulted in the NORMAN 2020 Land Use and Transportation Plan, the subject of a greenbelt for Norman was discussed. Following public hearings, the creation of a greenbelt was adopted as one of the goals of the 2020 Plan. Since no major studies of a greenbelt program have been conducted for Norman, the City Council elected to appoint a Greenbelt Steering Committee to study and report on the pros and cons of a greenbelt. This initial Steering Committee Report has been prepared in response to that mandate.

In 1961, the Norman City Council took the unusual action of increasing the corporate limits of the city from 11 square miles to 193 square miles. The primary motive for this addition was the need to give legal protection to the southern portion of the Lake Thunderbird drainage basin. Officials thought that the city's planning and zoning standards could be used to prevent pollution that might result from uncontrolled urban sprawl within the watershed. Because the pace of urban growth has been relatively slow in the basin over the past thirty-six years, these traditional tools have been reasonably effective. However, additional means will most certainly be needed to fully implement the goals and policies of the 2020 Plan. The development of a greenbelt plan could offer a wide array of new organizational and legal approaches to supplement existing land use controls.

Land trusts, conservancy districts, greenway systems, public acquisition of urban development rights, public purchase of environmentally sensitive lands, use of conservation easements and various fiscal and tax incentives are a few of the many approaches currently being used by local and state governments to manage urban growth. Where population growth pressures are great, all of these methods have proven helpful in preserving greenbelts and other open space elements. This study examines the ways that the City of Norman could benefit by using some of these newer growth management techniques.

#### GREENBELT ORIGINS

The term greenbelt is of relatively recent origin. It was first used by Raymond Unwin, an English architect, to describe a rural stretch of land surrounding a city or village and creating a more or less permanent separation from other nearby urban areas. Its principle purpose was containment of urban boundaries. The greenbelt idea was initially described by Ebenezer Howard in a book published in 1898 and re-issued in 1902 in a slightly revised and re-titled version under the name Garden Cities of To-Morrow.

The desire for open space to be used to separate individual cities from one another was an outgrowth of the British Garden Cities movement. Greenbelts are used in the designs of Letchworth (1903) and Welwyn (1920). These were England's first Garden Cities and both were planned to relieve the excessive population densities of central London.

Officials of London embarked upon a major greenbelt program when they purchased 38,000 acres (59.4 square miles) of land before World War II under authorization of the 1938 Greenbelt Act. By 1959 the greenbelt had been expanded to include 840 square miles. (William H. White, The Last Landscape, pp 153-162.) It was out of this British experience that the American New Town Movement and the American greenbelt concepts were born.

The history of the New Town movement in the United States, in the period prior to World War II, is well-documented in the classic book by Clarence Stein, Toward New Towns for America. The most influential work to come out of the period was the Radburn Plan of 1928. This small but beautiful New Jersey neighborhood was the first planned community to combine the Garden City concept with the automobile as the principal means of transportation. The Radburn model that created super blocks with cul-de-sacs and separate pedestrian walkways enabled people to go from home to school and shopping without crossing major arteries of traffic. Open space, gardens and other landscape amenities of Radburn remain, even today, an outstanding model for design of urban residential space.

In the late 1930's, three greenbelt towns were started which were financed by the federal government through the Resettlement Administration. Work started in 1935 on Greenbelt, Maryland; Greendale, Wisconsin; and Greenhills, Ohio. Each of these communities was surrounded by a large agricultural land belt, a true greenbelt in British terms. World War II and a shortage of building materials brought an end to the projects before any became full scale cities.(Gallion 142-147.)

It was in the second half of the Twentieth century that new towns with accompanying greenbelts became a significant part of the American scene. Some of the best known are Reston, Virginia; Columbia, Maryland; Irvine, California; and the Woodlands near Houston, Texas. However, greenbelts are not restricted to new towns. Hundreds of existing communities across the nation have added major open space elements, including greenbelts, to their comprehensive plans. Examples include: Virginia Beach Outdoor Plan, 1994; Riparian Corridor Policy Study, City of San Jose, 1994; Greenway Linkages In Overland Park, Kansas, October 1991; Greenbelt Plan, City of Stillwater, Oklahoma, 1971; New Hope Corridor Open Space Master Plan, 1990, a county plan for Durham, Chapel Hill and Orange County, North Carolina; and an Open Space and Conservation Element, City of Carlsbad, California. In all more than thirty community open space plans were reviewed by the Norman Greenbelt Steering Committee. In terms of scope, implementation, financing and economic impact on the city, the Boulder, Colorado plan seems to be a program that may provide a guide for Norman citizens. A brief summary of what is widely known as the "Boulder Greenbelt Program" is provided in the following paragraph.

In 1967, Boulder citizens elected to establish a 0.4 cent sales tax for the purpose of acquiring lands for a greenbelt system. In 1989 an additional 0.3 cent tax was added for fifteen years to accelerate land acquisition. By FY 1997, this public open space system comprised 26,151 acres, acquired at a cost of \$105,850,298. In addition to their value in managing urban sprawl and creating a buffer from other urban areas, greenbelt lands have a wide variety of other uses. Some of the land remains in agricultural use. Other areas are used for nature study, wildlife habitat, fishing and recreation. Hiking, biking, horseback riding and picnicking are provided along designated trails. The extensive trail system attracts more than two million visitors a year, many of them tourists. The Boulder program is one of the most completely developed in the United States, the result of thirty years of experience in planning, financing and administering a greenbelt. Since Norman and Boulder are in the same population class, their plan may prove to be a highly useful model.

## THE PURPOSES AND USES OF A GREENBELT

There is considerable variation between the English and the American concepts of greenbelts. "In this country the term greenbelt is loosely applied to any kind of open space. In England it has a fairly precise meaning." (Whyte, p. 152). The English version is a large swath of permanent open space that surrounds a town or city. The primary purpose of this band of open space is to prevent the outward urban expansion of the community that it encircles, and to keep outside urban growth from merging with the protected community. The greenbelts of England serve both to contain and to separate urban places. As long as the area of the greenbelt remains rural, the actual land uses and ownership of the open spaces have usually been secondary issues. For example, the London greenbelt was planned to prevent "over spill of population" into the city from out-lying areas. The greenbelt was a belt of separation of urban settlements.

The idea to utilize open space to separate cities and towns did not initially involve large scale public purchase of greenbelt land, but instead, depended primarily upon public regulatory methods and tax incentives to prevent urban development of greenbelts. The actual public purchase of greenbelt lands was quite limited and the dichotomy between open space uses and open space for containment has therefore been a major problem. "The only way that open land can be maintained against growth pressures is function." (Whyte, p. 157) The lack of public access and the absence of what the public deems to be appropriate uses has proved troublesome for the London greenbelt system. Open space solely used to maintain urban boundaries generates few constituents who will give long term political support to its continued existence. It is this restricted use of greenbelt land that forms the major contrast between the American and the British concept of greenbelts.

Throughout the United States, the term greenbelt not only implies open spaces surrounding a city, but also includes internal corridors along rivers and streams, publicly owned open space for recreation and flood control, as well as farmland and preserved woodland. These are specific open spaces that have important public uses and benefits. They not only occur on the outer edges of the urban area, but also may be part of an internal network of "green" space threading through the various urban uses of the community.

To receive the support of city people in America, greenbelts must, in themselves, provide significant social and economic benefits to citizens. It is this factor that has made the Boulder program so successful. Trail systems give the public access to a wide range of recreational activities. Prime agricultural lands are conserved for farming. Mountain vistas are preserved and fragile environmental elements are protected. All of these open space uses need to be and are important to the citizens of Boulder. What are the purposes and uses of a greenbelt program that might be similarly attractive to the people of Norman?

## FACTORS INFLUENCING A GREENBELT FOR NORMAN

Norman is a community of many physical assets, some of which are quite unique compared to other cities within its population class. The size and natural features of the city are most unusual. The 193 square miles presently within Norman's corporate limits offer citizens the landscape options of Cross Timbers woodlands, prairie grasses of the Great Plains, a rich diversity of wildlife throughout the riparian corridors of the Canadian and Little Rivers and their tributaries, and, maybe best of all, the Thunderbird lake and park system that attracts more visitors annually than any other lake in Oklahoma. The waters of Lake Thunderbird and the underground Garber-Wellington formation provide a plentiful supply of water for domestic and other uses.

Other special features include a compact urban core with development ringing the beautiful campus of the University of Oklahoma and large open spaces beyond rather sharply defined urban edges. Suburban sprawl is rather limited, and more than eighty per cent of Norman's large territory is still in rural open space. These are indeed assets that both citizens and visitors can enjoy. The natural features that shape the townsite are shown on subsequent pages, Figure One and Figure Two. The protection of this rural environment clearly is a major concern of Norman citizens, as indicated by public hearing responses in the recent NORMAN 2020 Plan update. A greenbelt program would add a variety of new legal and administrative options to augment the more traditional land use controls that are now being used.

A greenbelt program would be an aid in the conservation of some of Norman's most important natural features including riparian corridors along rivers and streams and the wildlife habitat that is concentrated there. Prime farm land and flood plains could be protected from urban uses and soil erosion. The open spaces of a greenbelt could preserve wetlands, woodlands and other natural areas containing unique or fragile environmental features. Areas for recreation, off-road trails and greenways would be attractive greenbelt functions. Finally, one of the traditional and significant purposes of greenbelt lands has been the separation of villages, towns and cities. With the recent expansion of suburban growth throughout most metropolitan areas, greenbelts have become an important growth management tool to protect a city from outside urban intrusion.

Historically, Norman has always enjoyed the status of being a free-standing, independent community surrounded by open countryside. The Canadian River on the west and Lake Thunderbird on the east form strong geographic boundaries; and yet, if urban growth continues at its present pace, Norman and Moore will soon merge. Probably only publicly controlled open space, a greenbelt, along the north and south edges of the city, can insure the continuation of Norman's independent physical identity.

A greenbelt system can be effectively utilized to protect riparian corridors along the many tributaries that drain into Lake Thunderbird and into the Canadian River. If additional conservation measures are not taken within the next decade, it is doubtful that existing zoning and subdivision regulations will be adequate to provide long term protection from the impact of suburban growth along these corridors. Free flowing and intermittent streams not only carry off excessive storm water, but they also recharge both ground water and surface water supplies. They aid in flood control and need protection from erosion, siltation and pollution from urban waste and excessive concentrations of pesticides, herbicides, fungicides and other types of pollutants. The importance to the whole community of preserving these riparian corridors in their natural state cannot be over-emphasized.

The landscape along rivers and streams contributes visual amenities while also serving as important corridors for wildlife habitat. A 1994 study of wildlife in Norman found that the region is home to 172 species of mammals, birds, reptiles and game fish. These represent approximately 40 percent of all wildlife species indigenous to the State of Oklahoma. About half of all the species in the Norman region are found in riparian systems and associated bottom lands (Bill Ridley, Habitat/Wildlife Report, p. 1, unpublished). Ridley further observes, "The unique ecology of this region, with its intersecting forests, waterways, and prairie, blends together to create a unique natural setting. By thoughtfully designing a system of greenways, this natural setting can be preserved in its pristine state, and the community-at-large will be able to enjoy Norman's natural environmental resources in the future." Wildlife will be conserved only if these riparian corridors remain primarily in their interconnected and natural state. This should be one of many objectives of a greenbelt system for Norman.

Since most of the prime farmland in the Norman corporate limits is located in the flood plains of the Canadian River and the Little River, a greenbelt would offer the means to protect both of these important features. While the policies recently adopted in the Norman 2020 Plan establish a ten acre density for housing in areas classified in the 100 year frequency flood plain, this will not guarantee that these prime farmlands will remain in agricultural production. One of the major successes of greenbelts in the United States has been the protection of farmland from urban development. Questions may be raised about the need to preserve prime farmland for agricultural production, but a number of recent articles have addressed this issue in the public press.

A report under the title "Development Encroaches on US Farmland", which appeared in the March 21, 1997 issue of the Christian Science Monitor, identified the ten most threatened agricultural areas in the United States. The list starts with the Sacramento and San Joaquin Valleys in Central California, and also includes the Texas Blackland Prairie in East Texas as well as New England and eastern New York. The article states that "...if the loss of productive farmland continues along with current rates of population growth, the U.S. could become a net food importer by the mid-21st century."

The Vermont Land Trust is making a major effort to preserve agricultural lands, as well as other types of open space for conservation and recreation purposes. One hundred and twenty farms were preserved during the first eight years existence of this Trust.

Most of the shallow sandy soils of east Norman, the area located primarily east of East 48th Avenue, are not classified as prime lands for agriculture. But there is fairly extensive small scale production of garden vegetables, fruits and nuts, and suitable grasses for pasture for animals. Much of this farm produce comes from small tracts and is sold locally, and the present zoning policies of the 2020 Plan can largely protect these farming activities. However, similar zoning policies may prove to be inadequate to preserve the prime farmlands for large scale crop production on the alluvial flood plains and prairie lands of west Norman. If these areas are divided into ten acre tracts for housing, they will be too small to remain viable economic units for major farm production. As a community that has expressed strong support for conservation of the environment, policies that would permit urbanization in flood plains and a concurrent loss of prime farmlands would seem highly undesirable. Confronted with similar problems, other communities have supplemented zoning policies with other legal methods to protect farmlands and other open spaces.

Some of the more recent legal devices employed for open space preservation include the use of conservation easements and the acquisition of development rights. In other situations, direct purchase of land followed by lease back/sale back with covenant arrangements have left lands in private ownership, yet restricted to agricultural uses. These and other devices are discussed in more detail in the next section of this report.

## LEGAL METHODS FOR CONTROLLING GREENBELT LANDS

Land Use Zoning has been the primary means of public regulation of land in local jurisdictions in the United States for the past three quarters of a century. The Norman City Council adopted Norman's first zoning ordinance in 1922, primarily to regulate poultry processing. As this first ordinance was enacted before state authorization was provided in the Planning and Zoning Enabling Act of 1923, a revised and greatly expanded zoning ordinance was passed in 1924. Although changed many times since, Norman's zoning ordinance has been in continuous use from the time of its first adoption in 1922.

Zoning was initially devised as a means for controlling urban land uses. By the early 1950's, attempts to use zoning to control development densities in suburban areas met with some success, though state supreme courts were reluctant to authorize required parcel sizes that were greater than five acres. Except for Hawaii's 1961 state-wide Land Use Law, significant zoning of rural areas, as a means to preserve agricultural lands for farming purposes, started primarily after 1970. The National Agricultural Lands Study, published in 1980, was prepared by the Regional Science Research Institute, Philadelphia, Pennsylvania, under the auspices of twelve federal agencies, including the U.S. Department of Agriculture. The sub-title more clearly denotes the subject matter, The Protection of Farmland; A Reference Guidebook for State and Local Governments. This major study begins with the statement: "Visualize a strip of land half a mile wide stretching from New York to California. That is one million acres--the amount of important farm land converted to other uses and irreversibly lost to agriculture every year in the United States." The study further reports, "from 1967 to 1975, three million acres of agricultural land were lost each year. "(NAL Study p.16) Moreover, the amount of land annually lost to urbanization has increased in the 1990's. Zoning will remain the most useful tool for urban land use management, but changes will be needed to make it more effective in rural areas to provide farm land protection.

The June, 1996 issue of Zoning News, published by the American Planning Association, devotes its' main article to reforms needed to make zoning more effective in rural areas. "The place to start is with zoning ordinances that practice what rural master plans preach: preservation of the countryside and the development of villages. Unless the new generation of rural zoning laws abandons the suburban models that have been used previously . . . we will not have a settlement pattern that meets the needs of rural areas." Zoning techniques that are better adapted to the economic and social realities of rural lands and rural life styles need to replace existing suburban models. However, farmland preservation cannot depend solely on rural zoning changes for survival. There are newer legal means that should be employed to supplement zoning when making plans for a greenbelt system designed to protect prime agricultural lands and other rural open spaces. These legal approaches include the following:

1. Public acquisition of urban development rights;
2. Conservation easements;
3. Public purchase and use of land;
4. Public purchase of land and lease back/sale back with covenants;
5. Private donations of land, easements or development rights; and
6. Private donations of land with tax advantages.

There are many other legal methods described in current literature, however, those listed above would seem to be the most useful in starting a greenbelt program for Norman. Each of these methods is briefly described below.

### Development Rights

The ownership of land in fee simple constitutes a bundle of rights, many of which can be sold or given separately to other persons, corporations or governmental entities, often producing various economic benefits, including tax reductions. These "rights" include, among others, air, water and mineral rights as well as the right to urbanize land or what has been termed development rights." The right to develop land may be acquired by a governmental unit, either through purchase or donation. This technique has been widely used as an open space protection measure, although the idea may have originated as a farmland protection device.

The end of World War II placed great pressure on the housing industry, especially in the larger metropolitan areas of America. In the early 1950's in Bucks County, located on the northern edge of Philadelphia, a new suburban community for 75,000 people was built in the south edge of the county. Bucks County historically had developed as a farming area with a scattering of small towns and villages, but, with the completion of Levittown, land prices escalated, tax valuations of rural property greatly inflated, and developers looked for farms to buy. Although a few farmers sold, many others wanted to continue on their family farms but were confronted with new problems in addition to the tax assessor. The several hundred city people who moved in across the road found farm animals, especially dairy cattle with accompanying odors, to be highly unacceptable neighbors. It seemed evident that, if a few farms scattered throughout the rural area were sold for urban development, the whole farm economy would be destroyed. And yet, this was good farm country and all of the agricultural products were needed in the nearby cities. To save the farm culture, at least two things were required. County officials needed to agree to assess farm lands at farm values rather than urban subdivision prices and urban development had to be restricted to specific areas that did not encroach on farm communities.

It was out of this dilemma that the idea of control of development rights emerged, first proposed by William H. White, a Philadelphia author, conservationist and planner, in the 1950s. If all farmers would agree to donate the development rights on their farms to Bucks County, in exchange for receiving a lower property assessment (or differential assessment as it was termed), the open space required for farming could be preserved. The extent of success of the Bucks County development rights program has not been documented, but it did provide a model which has subsequently been used throughout the country.

The first reported major use of development rights acquisition to protect farm land was initiated in Suffolk County, New York in 1974. (National Agricultural Lands Study, p. 149.) The NAL study reports that by 1980 there was some type of differential assessment program to reduce the tax burden on land in farm production in forty-eight states. Oklahoma is now included in that list. Development rights programs have increasingly been used in recent years and received support from Congress in 1996.

"In Lancaster County, Pa., another agricultural area rated as endangered by AFT, a program to pay farmers some \$2,000 an acre to forego the right to develop their land has helped conserve 24,000 acres in both large blocks of farmland and as rural buffer zones around cities.

Marian County, Ca., which in 1980 set up the first private trust devoted to agricultural land, has preserved some 25,000 acres of land with a similar program. The success of these efforts prompted Washington lawmakers to set aside \$15 million in the 1996 Farm Bill for federal grants to purchase development rights. So far, 37 localities in 17 states have received grants." (Christian Science Monitor, Friday, March 21, 1997, p. 12.)

Norman might benefit from this type of Federal grant program as part of a greenway development plan.

### Conservation Easements

Conservation easements are limited rights, either purchased or donated, acquired to achieve specific conservation objectives within a designated area. They can be particularly useful in protecting riparian corridors along small streams and drainage channels to insure that encroachment of buildings, fencing and other structures do not interfere with water flow or wildlife pathways, and that trees and other natural landscape elements are maintained in a natural state. They may also be used to protect scenic vistas or

special environmental features. Easements will not necessarily provide public access, but administrative access is required for periodic inspections to insure that provisions of the easement are not violated.

Conservation easements are working in many places to preserve ranchland as well as prime farmland. For example, Dean and Jim Rossi were looking for ways to keep their ranch in Colorado from being converted to small tracts for housing. Dean Rossi, president of the local cattlemen's association had been raising cattle with his brother, Jim, for many years and wanted to continue. After several consultations with local scientists from the Nature Conservancy, they arrived at a solution. "Last May, they agreed to place a conservation easement valued at \$835,000 on 600 acres of their land. They donated over half of the easement's value to the Yampa Valley Land Trust, getting a substantial tax benefit in return. They received \$375,000 for the remaining portion. The easement will protect four miles of river habitat along both sides of the Yampa River. The deal is significant for it marks the first purchase of a ranchland conservation easement in Colorado." (Planning, May 1997, "Do Fence Me In", pg 18, American Planning Association.)

The advantages of a conservation easement (sometimes termed a restriction) are that it is highly flexible; it keeps property in private ownership and on the tax rolls; it permits the use, sale or other transfer of ownership, subject to the terms of the easement; and it has become an increasingly popular and widely used conservation tool throughout the United States.

The disadvantages of a conservation easement relate to the fact that it has a long and indefinite time frame since the grant is usually in perpetuity. Careful documentation of property conditions is required to establish baseline information needed to prove violations. Periodic and continuous monitoring of property by field surveys may be necessary and considerable administrative costs may be incurred. However, they frequently are the most acceptable means for environmental conservation.

Fortunately, excellent information on all phases of acquisition, use and legal factors is available on conservation easements from the Land Trust Alliance and from several other sources. Model forms for easements, administrative requirements and stewardship programs are outlined in handbook form. Much of this information is already available in the Norman Planning Department.

#### Direct Land Purchase and Lease Back/Sale Back Programs

Direct public ownership of land maximizes public control of the uses of that land. Public ownership is no guarantee that the decisions made by public officials over a long time period will always be in the public interest nor will it insure that conservation actions will protect the environment, but there are activities that are clearly best served by public ownership. Illustrations include major water supply lakes; large scale recreation facilities; greenways and trailways that are designed for intensive public access and use; and fragile or hazardous environmental elements that have no economic utility as private property. Much of the land proposed for a greenbelt for Norman can remain in private ownership and use so long as it remains rural open space and is not used in a way or for purposes that degrade the natural environment or adversely affect other properties in the community. To achieve these objectives, direct purchase of land may be the most cost effective approach.

When appraisals are made of the cost of purchasing development rights or other conservation easements, it may be determined that the cost of actual purchase of the land will not greatly exceed the cost of acquiring easements. By purchasing and reselling or leasing the land for farming, with legal covenants to protect greenbelt objectives, the costs of open space projects may be partially or fully amortized. Each



tract of land will need to be evaluated separately to determine the most cost effective and politically acceptable method for accomplishing greenbelt objectives.

#### Private Donations

Private gifts of conservation easements, development rights and full or partial fee simple transfers of property have proven to be significant in the creation and maintenance of greenbelts. Donations often provide substantial tax advantages. Retirement income with life estate provisions may be included in the gift agreement. For additional detailed information see Tax Economics of Charitable Giving, Twelfth Edition, 1995, published by Arthur Andersen. A copy is available in the Norman Planning Department Library.

## PART II

### ORGANIZING FOR ACTION

The development of a greenbelt and other programs to protect the natural environment can provide enormous benefits, but will require a strong community commitment over a period of many years. To accomplish the work program, a large number of enthusiastic and committed citizen volunteers and professional staff will be needed. But if the achievements of other communities can be used as a measure, the benefits of a greenbelt can be enjoyed by future generations of Norman citizens. A list of actions needed to initiate such a program is presented below.

#### A. Greenbelt Plan

A Greenbelt Plan will need to be prepared for Norman. It is suggested that this plan be prepared under the guidance of the proposed Norman Land Trust or the present Greenbelt Steering Committee. This plan can best be done by those who already have an intimate knowledge of the natural environment, the land use patterns and the cultural characteristics of the community. It is recommended that the plan be developed by the proposed Norman Land Trust or the present Greenbelt Steering Committee, supported by Norman city staff, and supplemented by specialized professional consultants. Additional permanent staff will probably be required for greenbelt development and maintenance when the greenbelt plan reaches the implementation stage.

Elements of the Greenbelt Plan will need to include the following:

1. Basic Purposes and Objectives of the Greenbelt Program;
2. The Land Areas and Other Elements to be acquired or otherwise protected as a part of the Greenbelt Plan;
3. The Legal Measures needed to implement Greenbelt objectives;
4. Sources and Methods of Financing the various continuing programs of Greenbelt planning, development, maintenance and administration; and
5. The Organizational Structure of the professional staff that will be needed to carry out the Greenbelt objectives.

#### B. A Greenway Plan Within a Greenbelt System.

In addition to the greenbelt plan elements listed above, it is proposed that a greenway plan be developed as a part of the greenbelt system. A greenway is a corridor system of paths and trails for hiking, jogging, biking and horseback riding. Picnic areas, fishing, nature study, bird watching and other activities also may be included as recreational elements. Trails may include off-road pathways threading through riparian corridors along rivers and streams, across open country and also along existing roadway easements. Since greenways are intended for public access they normally are publicly owned, constructed and operated by some governmental unit. The City of

Boulder officials consider their greenway system one of the best features for generating long-term support for their greenbelt program. Citizens can enjoy a great diversity of recreational opportunities afforded by the greenway and, by having access, can see and enjoy the open spaces of the greenbelt without encroaching on privately owned farmlands and rangelands.

Greenways have proven very popular in recent years and have been utilized as tourist attractions. Fordors' 1997 book on Alaska contains the following quote (p. 119), "Anchorage is laced with 125 miles of urban trails that meander through wooded greenbelts and quiet neighborhoods;" and, as previously stated, Boulder's trail systems attract more than two million users annually.

Greenway developments have been well documented in recent years. Three of the most notable works include Greenways for America, 1990, by Charles E. Little; Ecology of Greenways, 1993 Edition, Smith and Hellmund; and Greenways, A Guide to Planning Design, and Development, 1993, by Flink and Sterns. These are available in the Norman Planning Department Library.

A class of graduate students in the Division of Planning and Landscape Architecture of the University of Oklahoma prepared a comprehensive study of the natural environment of the City of Norman and a design for a circular greenway around the outer rural edge of Norman in the Fall Semester, 1994. These studies may provide useful background information and design guidelines if a greenway development program is initiated in the near future.

#### C. Norman Land Trust

A land trust for Norman will be needed in the planning and implementation of a greenbelt program if the model of other cities is to be followed. The major work to be done in creating and maintaining a greenbelt concerns acquiring and managing land and money, and a land trust can be highly effective in dealing with both objectives.

The Land Trust Alliance (LTA), an umbrella organization for land trusts, reports that in 1994 there were approximately 1,100 land trusts in America, and the number is increasing rapidly. About half of the trusts were formed in the last ten years. The New England region is the most prolific user of trusts with 395, followed by 173 on the West Coast. (LTA Special Report. The 1994 National Land Trust Survey, Fall 1994.)

Land trusts are nonprofit organizations that work through either a voluntary arrangement, like that of the Vermont Land Trust, or as a part of a government created entity. Both types have similar objectives and characteristics. They are formed to protect open spaces such as prime farmlands and other natural resources. They have a tax-exempt status, use both volunteer and professional staff, and must work closely with many government and private agencies. Many skills are required including those of architects, planners, lawyers, realtors, bankers, biologists, zoologist, engineers, environmentalists and concerned citizens. Fortunately, the requirements for starting a land trust are well documented in current and comprehensive reports on the subject. Some of these publications are available for reference in the Norman Planning Department Library.

#### D. Financing Sources

Two different types of financing programs need to be developed. Funds for financing the actual purchases of land, conservation easements, development rights, construction of greenways and

other greenbelt elements will be required. A variety of funding sources will be needed for the large number of relatively costly projects to be funded over a 10-20 year period. Annual funding also will be needed to pay for program planning and maintenance of the greenbelt system. These annual funds should be made a part of annual budget of the City of Norman. The fund sources suggested below are proposed to finance greenbelt development. These are sources that have been used frequently and successfully by other communities.

1. Sales Tax Revenues;
2. General Obligation Bonds, designed to produce a uniform revenue flow over a several year period;
3. Grants from other governments;
4. Grants from private foundations;
5. Private donations of property, easements, or funds;
6. Funds received from rents and leases of property;
7. Donations of property for tax benefits;
8. Revenues from fees;
9. Land exchanges and land sales;
10. Life estate purchase programs;
11. Mitigation Banks; and
12. Benefit Assessment Districts.

#### E. Citizen Participation and Information Programs

The long-term success of all of the types of programs described in this report is entirely dependent on the enthusiasm, support, and voluntary participation of the citizens of Norman. Strategies are needed to bring together coalitions of different constituencies who share a common interest in the development of a greenbelt system and in the protection of prime farmlands, riparian corridors, and other natural areas. The talents of many citizens, organizations, and institutions must be enlisted in a community wide greenbelt effort. Some of the means for initiating contact with these groups are listed below.

1. The elements of the greenbelt plan should be suitable for presentation by local newspapers, radio and television stations, and to local community groups.
2. A newsletter on greenbelt progress and relevant environmental issues locally and in other jurisdictions should be widely distributed periodically.
3. A web site for local and national communication could sift creative ideas and concepts from around the world.
4. A brochure on "Places to See" should be compiled on interesting greenbelt and greenway systems throughout the United States, and in other parts of the world. This Green Country Travel Guide could alert Norman citizens, traveling on business or pleasure trips, to opportunities for visiting unique environments that also might provide useful models for Norman's greenbelt.

5. A list of organizations in Norman should be analyzed to determine groups that might have a special interest in some phase of a greenbelt development program, and should provide them with information on the proposal.
6. Norman should become a member of the Land Trust Alliance, the umbrella organization for land trusts in the United States, with a home office in Washington, D.C. Norman representation should attend LTA national conferences and participate in information exchange programs.
7. Citizen advisory committees, work groups, citizen design workshops, local conferences and seminars, and other means should be used to generate citizen interest in greenbelt programs.

## SUMMARY AND CONCLUSIONS

AFTER STUDYING GREENBELT CHARACTERISTICS, USES AND IMPACTS ON THE QUALITY OF LIFE IN OTHER COMMUNITIES THROUGHOUT THE UNITED STATES, THE STEERING COMMITTEE BELIEVES THAT A GREENBELT PROGRAM COMBINED WITH A SYSTEM OF GREENWAYS CAN PROVIDE ENORMOUS IMMEDIATE AND LONG TERM BENEFITS FOR THE CITIZENS OF NORMAN AND FOR FUTURE GENERATIONS OF PEOPLE WHO LIVE AND VISIT IN THIS COMMUNITY. BUT TO ACHIEVE SUCH A PROGRAM WILL REQUIRE A STRONG COMMUNITY COMMITMENT BY ENTHUSIASTIC CITIZEN VOLUNTEERS AND PROFESSIONAL STAFF OVER A PERIOD OF MANY YEARS. IF THE CITY COUNCIL OF NORMAN DETERMINES THAT THE DEVELOPMENT OF SUCH A PROGRAM IS DESIRABLE AT THIS TIME THE FOLLOWING ACTIONS ARE RECOMMENDED:

- A. Charge this Steering Committee, or a newly created Land Trust committee, with the task of preparing a Greenbelt Plan. The Greenbelt Plan should set forth the basic purposes and objectives of the greenbelt program; establish the land areas and other elements to be acquired or otherwise protected by the program; ascertain the legal measures and administrative organization needed to develop and maintain the greenbelt and greenway system, including the professional and other staff needed to operate and maintain the system; assess the costs and sources of financing required for planning, developing and maintaining the system; and finally, identify the economic benefits and costs that Norman might expect from a greenbelt program. We believe this plan should be prepared through a combined effort of this committee, city staff and, where needed, with specialized assistance from technical consultants.

In addition to preparing the plan as outlined above, a variety of new administrative and legal tools are needed to implement the greenbelt program and augment the more traditional tools of zoning, building codes, subdivision regulations and infrastructure design standards. Legal approaches that have been extensively tested in greenbelt development in other communities include the following:

1. Public acquisition of urban development rights;
2. Conservation easements;
3. Public purchase and use of land;
4. Public purchase of land and lease back/sale with covenants and other restrictions;

5. Private donations of land, easements, and development rights;
  6. Private donations of land with tax advantages.
- B. A Norman Land Trust should be created to implement the greenbelt program. It is suggested that a charter be prepared to create a Land Trust composed of 25-35 citizen members. A Land Trust Associates program should also be considered as a means of broadening the base of continuing citizen support for the program. If desired, the Steering Committee will prepare a tentative charter for a land trust and provide a more detailed description of a land trust associates organization and responsibilities.
- C. The long term success of a Norman Greenbelt and Greenway Plan is entirely dependent on the continuing and enthusiastic support of many coalitions of citizen interest groups. These groups need to be identified and involved in the planning and implementation process. They will have much to contribute to any community wide open space system and environmental protection plan that may evolve.

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